West Point 15' Quad West Point 15' Quad P637 ~~P722~~
15X, 4.75, 2.0E 15X,

9—255
(Jan. 1927)

(for Porosity test, legend)

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
WATER RESOURCES BRANCH

RECORD OF WELL

hole	no. 4 A22
Core Borings	
Agreement No. 22	
Foundry Brook Siphon	
Sta. 823+23	2.6W
checked	6-18-07

Locate well on plat of section.

1. **Location:** State N.Y. State County Putnam
   Nearest P. O. Cold Spring Direction from P. O. NE
   Distance from P. O. 1 miles; ¼ sec. ___, T. ___, R. ___
   If in city, give street and number Town of Phillipstown
2. **Owner:** New York City Catskill Aqueduct Address ~~NY~~ Board of Water Supply 120 Wall St., N.Y. City
   Driller: C. H. McCarthy Address Foundry Brook Springs
3. **Situation:** Is well on upland, in valley, or on hillside? hillside.
4. **Elevation of top of well:** 340.75 ft. above (Above or below) the level of sea (Sea, depot, lake, or stream)
5. **Type of well:** drilled (Dug, driven, bored, or drilled); kind of drilling rig used shot drill (Solid tool, jetting, rotary, etc.)
6. **Depth of well:** 230.4 ft.; year in which well was finished May 27, 1907
   Does well enter rock? yes; if so, at what depth? 7 ft.; kind of rock gneiss
7. **Diameter:** At top 6" inches; at bottom 3¼" inches.
8. **Principal water bed:** Fordham gneiss (Gravel, sand, clay, or rock. If rock, state kind)
   Depth to principal water bed ___ ft.; thickness of bed ___ ft.
   If other water supplies were found, give depth to each ___
9. **Casings:** Kind yes; size 6"; length 7 ft.; between depths of 0 and 7 ft.
   Kind yes; size 3½"; length 7 ft.; between depths of ___ and 21.35 ft.
   Kind ___; size ___; length ___ ft.; between depths of ___ and ___ ft.
   Packers (if any): Depth at which packers were used ___; kind ___
   Screen or Strainer: Was well finished with screen? ___; kind of screen ___;
   length of screen ___ ft.; diameter ___ inches; size of openings ___
10. **Head:** Does well at present overflow without pumping? ___; did it overflow when new? ___;
    if flowing, give pressure ___ lb. per sq. inch; or height water will rise in a pipe ___ ft. above surface;
    original pressure or head ___; if not flowing, give water level in well ___ ft. below surface.
11. **Pump:** Is the well pumped? no; kind of pump —;
    size or capacity of pump ___; kind of power ___
12. **Yield:** Natural flow at present (if any) ___ gallons per minute; original flow ___ gallons per minute;
    well has been pumped at ___ gallons per minute continuously for ___ hours;
    quantity of water ordinarily obtained from well none gallons per day.
13. **Use:** For what purpose ~~is~~ was the ~~water~~ well used? test hole
14. **Quality of the water:** ___ (Hard or soft, fresh or salty, etc.); is there an analysis? ___
15. **Cost of well,** not including pump: $6.25 per foot = $1440.00 Temperature of water ___ °F.

Name of person filling blank J. Ferriman from ~~[illegible]~~ NY Board of Water Supply Record

Date Oct. 25, 1950 Address ___

On the back of this sheet give the record of the beds through which the well passes and any other facts not given above.

6—9642

LOG OF WELL

KIND OF ROCK OR OTHER MATERIAL (Give color and tell whether hard or soft)	DEPTH, IN FEET From—	DEPTH, IN FEET To—	THICKNESS, IN FEET	REMARKS (Especially information as to water found)
Sand, gravel and boulders	0	7	7	Test pit dug
~~Bar~~ Gneiss - frequent seams & cracks to depth of 158 ft.	7	98.7	91.7	change gradual.
Gneiss and quartz	98.7	230.4	131.7	

% core recovery = 78%
Working time 50 - 10 hr. shifts.
Elapsed time 43 days.

Porosity Test not dated; but checked July 18, 1907

POROSITY TEST

Depth to packer	Pressure by Gauge in lbs.	Pumped. Rate per minute	*Leakage around packer gals.	Estimated quantity forced into rock per minute	Poured through casing above packer Rate per minute	
42 ft.	20	3.2 gals.	0.0	3.2 gals.		Single packer
76 ft.	20	3.0 "	0.0	3.0 "	0.25 gals	
100 ft.	20	2.9 "	0.0	2.9 "	0.30 "	
150 ft.	20	2.34 "	0.1	2.24 "	0.30 "	
158 ft.	20	2.40 "	0.2	2.20 "		Double packer
193 ft.	20	0.66 "	0.6	0.06 "	0.40 "	
209.7 ft.	100	0.004 "	0.0	0.004 "		

* Double packer indicated that drill hole was tightly plugged but water evidently passed through rock fissures from below lower plug in packer to drill hole above upper packer plug. At each test packer was raised & lowered until both plugs were in a continuous solid rock wall, at a depth of 158 ft. and above seams in the rock made it difficult to maintain a steady pressure greater than 20 lb. per sq. inch.

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